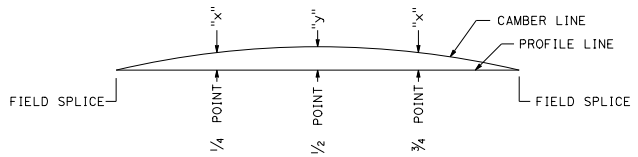


CAMBER DIAGRAM

ABBREVIATION:

R = Radius of 90° elbow

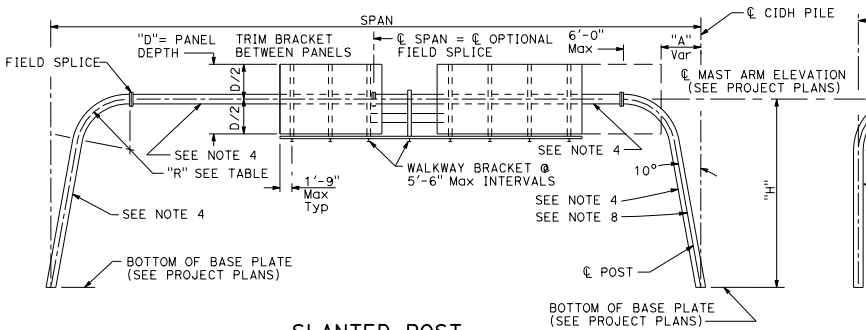
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

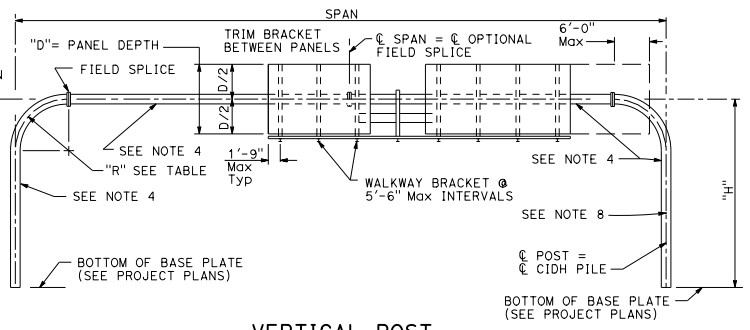
May 31, 2018
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Stanley P. Johnson — No. C57793 — Exp. 3-31-20 — CIVIL — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



SLANTED POST



VERTICAL POST

TABLE A

"D" PANEL DEPTH	"H" POST HEIGHT	POST TYPE No. FOR SPAN LENGTH BELOW									
		140'-0" TO 145'-0"	130'-0" TO 139'-0"	120'-0" TO 129'-0"	110'-0" TO 119'-0"	100'-0" TO 109'-0"	90'-0" TO 99'-0"	80'-0" TO 89'-0"	70'-0" TO 79'-0"	60'-0" TO 69'-0"	50'-0" TO 59'-0"
120"	29'-0"	VI	VI	VI	VI	V	V	IV	III	III	II
	27'-0"	VI	VI	VI	V	V	IV	IV	III	II	II
	25'-0"	VI	VI	V	V	IV	IV	III	III	II	II
	23'-0"	VI	V	V	IV	IV	IV	III	II	II	I
	21'-0"	V	V	IV	IV	IV	III	III	II	II	I
110"	29'-0"	VI	VI	VI	V	V	IV	IV	III	II	II
	27'-0"	VI	VI	V	V	IV	IV	III	III	II	II
	25'-0"	V	V	V	IV	IV	IV	III	II	II	I
	23'-0"	V	V	IV	IV	IV	III	III	II	II	I
	21'-0"	V	V	IV	IV	III	III	II	II	II	I
100"	29'-0"	VI	V	V	V	IV	IV	III	III	II	II
	27'-0"	V	V	V	IV	IV	IV	III	II	II	I
	25'-0"	V	V	IV	IV	IV	III	III	II	II	I
	23'-0"	V	IV	IV	IV	III	III	II	II	II	I
	21'-0"	V	IV	IV	III	III	II	II	II	I	I
90"	29'-0"	V	V	V	IV	IV	III	III	II	II	I
	27'-0"	V	V	IV	IV	IV	III	II	II	II	I
	25'-0"	IV	IV	IV	IV	III	III	II	II	I	I
	23'-0"	IV	IV	IV	III	III	II	II	II	I	I
	21'-0"	IV	IV	III	III	II	II	II	I	I	I
80"	29'-0"	V	IV	IV	IV	III	III	II	II	II	I
	27'-0"	IV	IV	IV	III	III	II	II	II	I	I
	25'-0"	IV	IV	IV	III	III	II	II	II	I	I
	23'-0"	IV	IV	III	III	II	II	II	I	I	I
	21'-0"	IV	III	III	II	II	II	I	I	I	I
70"	29'-0"	IV	IV	IV	III	III	II	II	II	I	I
	27'-0"	IV	IV	III	III	II	II	II	I	I	I
	25'-0"	III	III	III	II	II	II	II	I	I	I
	23'-0"	III	III	II	II	II	II	I	I	I	I
	21'-0"	III	III	II	II	II	I	I	I	I	I

NOTES:

1. The maximum sign panel overlap onto elbow shall not exceed 6'-0" from the field splice.
2. When several sign panels are to be installed with spaces between panels, the total sign panel length is the sum of individual sign panel lengths only.
3. For spans ranging from 50'-0" to 145'-0", maximum sign panel coverage is as follows:

   a) For slanted post type: Span - "A" on both sides from ℄ of CIDH Pile.

   b) For vertical post type: Span - 6'-0" on both sides from ℄ of CIDH Pile.
4. All posts between base plate and field plate splice shall be as scheduled in table. All mast arms are standard pipe.
5. Before any portion of sign frame is assembled in its final position, the Contractor shall demonstrate to the Engineer by preassembly or other approved methods that the span length of the frame, with no load condition, is within ±1/2" of field measured span length between foundations.
6. If sign frames are erected as one unit, they shall be adequately suspended to avoid distortions or changes in span lengths between base plates.
7. At final position of post, all top and bottom anchor bolt nuts shall be snug tighten against base plate.
8. Drill and tap for 1 1/2"C chase nipple and plug with recessed pipe plugs. Place perpendicular to sign panel axis and away from approaching traffic. See Standard Plan ES-15C.
9. Maximum difference between post heights on an individual frame = 5'-0".
10. For standard pipe members (mast arms) with lengths greater than 78'-9", an optional field splice will be permitted at the centerline of span to facilitate hauling operations.
11. For location of optional welded splice in post, see Standard Plan S31.

TABLE B

POST TYPE No.	PIPE		"R" RADIUS
	NPS	THICKNESS	
I	20	1/2"	12'-0"
II	24	1/2"	
III	24	5/8"	
IV	30	1/2"	
V	30	5/8"	
VI	30	3/4"	

TABLE C

CAMBER			
POST TYPE No.	SPAN LENGTH	X	Y
II	50'-0" TO 119'-0"	2 1/4"	3 1/2"
II	120'-0" TO 145'-0"	3 3/4"	5"
III	50'-0" TO 119'-0"	2 1/4"	3 1/2"
III	120'-0" TO 145'-0"	3 3/4"	5"
IV	50'-0" TO 119'-0"	2 1/4"	3 1/2"
IV	120'-0" TO 145'-0"	3 3/4"	5"
V	50'-0" TO 119'-0"	2 1/4"	3 1/2"
V	120'-0" TO 145'-0"	3 3/4"	5"
VI	50'-0" TO 119'-0"	2 1/4"	3 1/2"
VI	120'-0" TO 145'-0"	3 3/4"	5"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

OVEREHEAD SIGNS-TUBULAR TWO POST TYPE LAYOUT AND PIPE SELECTION

NO SCALE

S32

1-29-18